

# STATE COMPLIANCE SOLUTIONS FIELD OQ **Operator Qualifications**

**Dennis Kuhn Lead Regulatory Compliance Specialist** 

(325) 660-8914

#### Operator Qualification (OQ) Rule

49 CFR 192 Subpart N - Gas

49 CFR 195 Subpart G - Liquid

Both Regulations say the same thing

# Department of Transportation's (DOT's) Operator Qualification (OQ) Rule (49 CFR 192 & 195)

"...requires Operators of DOT regulated pipelines to develop a qualification program to evaluate an individual's knowledge skills and ability to perform covered tasks and to recognize and react to abnormal operating conditions (AOCs) that may occur while performing covered tasks."

#### THE OLD POST

Member of the Associated Press.

Aenean commodo ligula eget dolor.

Aenean Aenean commodo ligula eget dolor. Aenean Commodo ligula eget dolor. Aenean Ceitrieboe fidodod.

ILLUSTRATED WEEKLY NEWSPAPER

et 1860

Friday, August 27, 1999

Price 6

#### The OQ Rule is Here!

#### The Mandate

The Operator ualification (OQ) rogram stems from a andate in 1992 and ontinues through resent Pipeline Safety cts. Based on oncems from ongress, current event cidents, the Act of 992, and again in 996, the Office of ipeline Safety leveloped regulations ddressing OO. Based on the wording ssociated with the Acts, specific areas. uch as operating and aintenance tasks. ere required language the pending gulation.

Initially in 1994, the old rulemaking approach was initiated and out of this came a training proposed rule. Industry. through negotiation. indicated that the vast majority of employees were presently qualified and capable of doing the jobs tasked by the operator. In turn, there was concern about subjecting employees to hours of training when, in fact, they were already qualified. The regulatory side concurred and requested a verification process be established

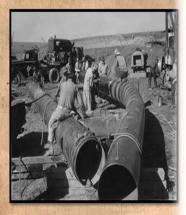
for employees to

substantiate their

qualification.

#### The Intent

The intent of the OO Rule is two-fold: 1) to ensure a qualified workforce on jurisdictional pipelines, and thereby, 2) reduce the probability and consequence of pipeline incidents or accidents caused by human error. Thus, OQ is not intended to be a onetime event, but a process that continues for the working lifetime of an individual. After initial evaluation and qualification have been completed, there will be a point in time where re-evaluation and requalification will be required.



#### The Operator Qualification Rule

Why do we need qualified individuals...

















Pipeline leak in Bellingham, WA that released 237,000 gallons of gasoline into a creek. 3 boys killed.





East Harlem Explosion March 2014. Eight People Killed

#### Operator Qualification (OQ) Rule

The OQ Rule is intended to provide an additional level of **safety** 

Requires pipeline Operators to develop a qualification program to evaluate an individual's ability to perform covered tasks and to recognize and react to abnormal operating conditions that may occur while performing covered tasks.

#### What Operators have to do to meet the OQ rule

- Develop a written OQ Plan
- Identify applicable covered tasks for the activities that will be performed
- Communicate requirements to all affected personnel
- Assure all personnel are qualified to perform the applicable covered tasks
- Obtain/Maintain qualification records
- Identify any unique conditions that may result in or be considered an AOC

#### What Operators have to do to meet the OQ rule

In accordance to the rule, Operators are responsible for identifying the covered tasks (CTs) for which personnel must be qualified.

#### Each covered task must also include:

- 1. Evaluation Criteria (including AOCs);
- 2. Method of Evaluation;
- 3. Span of Control Limits; and
- 4. Interval for Re-Evaluation of Qualified Individuals.

### Who Must Be Qualified

#### Who Must Be Qualified

#### Operators must ensure:

 All individuals, who operate and maintain pipeline facilities, are qualified to perform covered tasks.



#### Who Must Be Qualified

#### Operators must ensure:

 All individuals, who operate and maintain pipeline facilities, are qualified to perform covered tasks.

#### Operators are held responsible for:

 Ensuring ALL employees are qualified to perform covered tasks; contractors, subcontractors, and other entities.



#### Contractors

- Assure all personnel are qualified on applicable covered tasks that will be performed
- Understand specific Operator requirements (P&P's, AOC's, SOC etc.)
  - Assure contractors communicate any concerns to the Operator's representative
- Obtain/Maintain qualifications / records

#### Span Of Control (SOC)

The OQ Rule allows that covered tasks may be performed by non-qualified individuals when directed and observed by qualified individuals.

Based on factors such as risk, frequency, and complexity, a Pipeline Operator may place limits on tasks performed by non-qualified individuals (Span of Control).

#### Span Of Control (SOC)

While <u>directing</u> non-qualified individuals, the qualified individual must:

- Be able to <u>observe</u> the non-qualified individuals at all times
- Be in <u>communication</u> with the non-qualified individual(s)
- Be in <u>control</u> of the task

If the qualified person walks away, or for some reason is no longer in control of the task, the non-qualified individual(s) must stop performing that task.

# How Do Employees Become Qualified

The Evaluations - The Evaluator

# Qualified means that an individual is able to:

• Perform a covered task(s), and



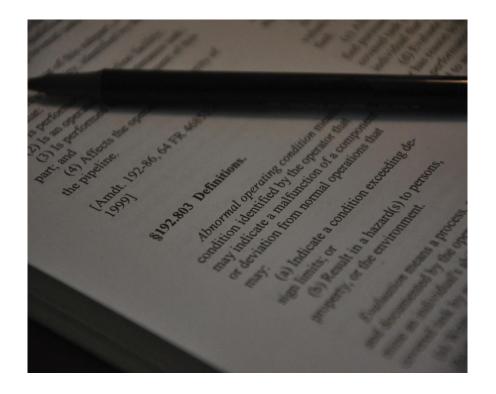
## Qualified means that an individual is able to:

- Perform a covered task(s), and
- recognize and react to abnormal operating conditions (AOCs) that may be encountered during the performance of the covered task(s).





As defined by the DOT in §192.803, an *abnormal operating condition* means a condition identified by the pipeline operator that may indicate a malfunction of a component or deviation from normal operations that may:



As defined by the DOT in §192.803, an *abnormal operating condition* means a condition identified by the pipeline operator that may indicate a malfunction of a component or deviation from normal operations that may:

Indicate a condition exceeding design limits; or





As defined by the DOT in §192.803, an *abnormal operating condition* means a condition identified by the pipeline operator that may indicate a malfunction of a component or deviation from normal operations that may:

Indicate a condition exceeding design limits; or

Result in a hazard(s) to persons, property, or the environment.



New London, Texas 1937



#### **Evaluations**

Evaluation means a process, established and documented by the operator, to determine an individual's ability to perform a covered task by any of the following:

#### **Evaluations**

- Written examination;
- Oral examination;
- Work performance history review
  - After October 28, 2002, work performance history may not be used as a sole evaluation method.
- Observation during:
  - Performance on the job,
  - On the job training,
    - After December 16, 2004, observation of on-the-job performance may not be used as the sole method of evaluation.
  - Simulations; or
- Other forms of assessment.

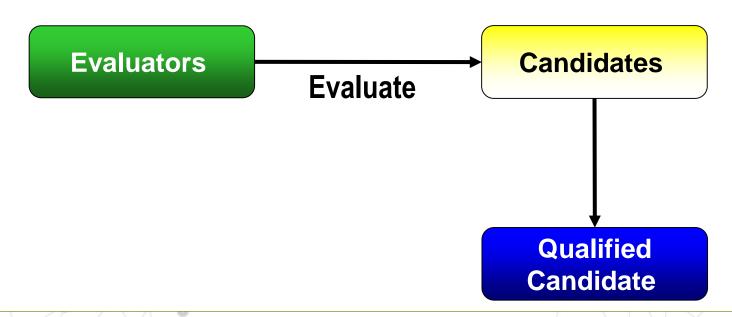
#### **Evaluator**

What should it take to be an evaluator of a covered task?

- SME / Technically competent
- Anybody
  - Depending on method of evaluation i.e., proctoring a written or computer-based exam.

#### **Evaluator**

- Each evaluation should determine whether or not the candidate is "Qualified".
- The evaluator must use the appropriate methods and criteria outlined or accepted by the Operator



#### **Evaluator Concerns**

- Group settings
- Coaching/training
- Necessary equipment not utilized
- Not following evaluation criteria and or appropriate methods
- "Pencil whipping"

#### Mitigate Evaluator Concerns

- Evaluator refresher training requirements
- Evaluator monitoring process
  - Documentation reviews/audits
  - Number of evaluations performed within a period of time
- Perform periodic evaluator assessments
  - Qualified Individual (QI) interviews
  - Field assessments
- Monitor QI performances

# Qualification Verifications and

Records

#### **Qualification Records**

- Contractors ensure they are current on the appropriate qualification
  - Qualifications that are approved for one operator may not be for another
- Operator personnel should verify qualifications <u>prior</u> to allowing covered work to be performed
  - Field verification reports
  - QR readers
  - Qualification cards
  - Website verification
- Prove the validation took place
  - Document the validation was conducted

"When the plastic pipeline installations at 1642 Park Avenue were performed, Con Edison contractor foreman had thought he was current on his plastic pipe joining operator qualification records ... but he was not," the NTSB said



# Consequences of Non-Compliance

## **Criminal Penalties**



©2016 Veriforce,

#### **Criminal Penalties**

#### Criminal penalties may be taken:

- ❖ If any person **willfully** and knowingly violates a pipeline safety requirement is subject to a fine of not more than \$25,000 for each offense, imprisonment for not more than five years, or both.
- ❖ If any person **willfully** violates a regulation for off-shore gathering lines is subject to a fine of not more than \$25,000 for each offense, imprisonment for not more than five years, or both.
- ❖ If any person **willfully** and knowingly injures or destroy any interstate pipeline facility, is subject to a fine of not more than \$25,000 for each offense, imprisonment for not more than 15 years, or both.
- ❖ If any person **willfully** and knowingly defaces, damages, removes, or destroys any pipeline sign, right-of-way marker, or marine buoy, that individual is subject to a fine of not more than \$5000 for each offense, imprisonment not to exceed one year, or both.

#### PHMSA Enforcement Actions

The Pipeline Enforcement Program has a number of different mechanisms to assure operator compliance and safe operation. Including:

- Letters of Concern
- Warning Letters
- Notice of Amendment
- Notice of Probable Violations
- Corrective Action Orders
- Notice of Proposed Safety Order

#### PHMSA Enforcement Actions

The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2016 increased the civil penalty authority of PHMSA to a maximum of \$209,002 per violation per day, up to a maximum of \$2,090,022 for a related series of violations.



### Examples of OQ Civil Penalties

- Operator allowed unqualified personnel to perform covered tasks: \$271,300 fine assessed
- Operator failed to identify a covered task (mud plugs) nor had anyone properly qualified: \$788,000 fine assessed
- Operator allowed unqualified personnel to perform covered tasks: \$41,200 fine assessed

#### Examples of OQ Civil Penalties

- Operator failed to identify a covered task (launching/receiving): \$133,100 fine assessed
- Operator failed to ensure through evaluation that employees were qualified to perform covered tasks on 29 separate occasions: \$86,400 fine assessed
- Operator allowed 101 unqualified contractor personnel to perform covered tasks on 500,000 suspected inspections.
   Penalty issued - \$50,000 for each of the 101 non-qualified contractors, totaling \$5.05 million

#### PHMSA Enforcement Actions

During inspections, PHMSA and state agencies can review records of any operations or maintenance activity. This includes, a covered task, the qualifications, evaluation methods, and dates the individual was evaluated.

- Ensure that each individual is qualified prior to their performance of covered tasks on an operator's pipeline.
- Documentation of that review should be dated to provide assurance that each individual was known and qualified to the specific covered tasks they would perform.

#### Recent NTSB Investigation Findings

Findings by NTSB in the Con Edison East Harlem, New York incident specifically indicate that Con Edison did not ensure that personnel performing covered tasks on their system were qualified.

Over a three year period, it was determined that 700 fusion jobs were completed by unqualified personnel – both company and contract personnel.

Even the Con Edison supervisor who performed the saddle fusion was not aware that he was not current on his qualifications.

#### Recent NTSB Investigation Findings

#### The state agency or PHMSA can:

- Level civil penalties for each individual that performed a covered task unqualified,
- Assess a compliance action requiring Con Edison to excavate some or all of the 700 fusion jobs and inspect or replace them,
- Assess compliance actions to address the OQ and O&M plans to ensure processes and personnel are in place to ensure that such an occurrence does not happen again.

# **OQ NPRM**

Effects on the Industry & What You Need to Know

#### OQ 101

- PHMSA final rule 08-27-1999 effective date Oct. 2002
- The OQ Rule remains in place
- PHMSA NPRM July 2012
- Comment Period Closed 09-08-2015
  - Utilities 5 , Pipeline 9, Others 25 (Comments received)
- Jan 26, 2017 OQ NPRM issues put on hold

#### The OQ Final Rule... without OQ...

#### What happened?

- There was an election...
- There was an administration change...
- There was precedence in the delay....

#### What happens next?

- PHMSA has new requirements
  - Executive Order on Regulatory Reform
  - John Gale, PHMSA's Director of Standards and Rulemaking

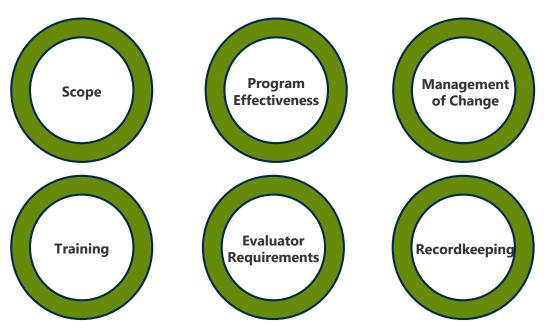
#### **OQ NPRM Update Overview**

#### Key proposed changes and additions

- Expanded definition of covered task
  - New Construction
  - Emergency Response
  - Integrity Management
- Focus on training as part of qualification
- Apply Management of Change to OQ
- Emphasis on program effectiveness review
- Document, document, document

### Let's Talk Specifics

#### Changes that will have greatest impact



#### Scope



#### Qualified individual – has been evaluated and can:

- 1. Perform assigned covered tasks
- 2. Recognize and react to abnormal operating conditions
- 3. Demonstrate technical knowledge required to perform the covered task
- 4. Demonstrate the technical skills required to perform the covered task
- 5. Meet the physical abilities required to perform the specific covered task (e.g., color vision or hearing)

#### Program Effectiveness Requirements



# Develop and implement a process to measure OQ program effectiveness

- Effective = minimize human error due to lack of KSAs
- Conducted once a year
- Written process to evaluate and amend based on findings
- Must include minimum measures defined by PHMSA to determine effectiveness
  - Number of occurrences
  - Qualified and non-qualified individuals involved in incident

#### **Evaluator Requirements**



- Establish criteria and training necessary to be an evaluator of individuals performing covered tasks
- Measure and track evaluators' performance

#### Recordkeeping Requirements

#### Maintain Program records

- Program effectiveness reviews
- Program changes
- List of AOCs
- Program MOC notifications
- Covered task list
- For each covered task: SOC ratios, reevaluation intervals, and evaluation methods
- Evaluator criteria and training

#### Retain program records for appropriate period

# Questions





#### Dennis Kuhn

Dennis.Kuhn@Veriforce.com (325) 660-8914







